

Title (en)

End cap with an integral flow diverter

Title (de)

Verschluss mit integriertem Stromumlenker

Title (fr)

Bouchon de fermeture avec divertisseur de flux intégré

Publication

EP 1528347 A2 20050504 (EN)

Application

EP 04077953 A 20041026

Priority

US 69632403 A 20031029

Abstract (en)

An end cap (30) closes the open end (26) of the tank (18). The end cap (30) is comprised of an inlet diverter wall (32) and tube diverter wall (34). The inlet diverter wall (32) extends into the tank (18) across the inlet axis (28) for redirecting fluid from the inlet (38) and longitudinally into the tank (18) along the end of the core (12). The tube diverter wall (34) also extends longitudinally into the tank (18) in a spaced relationship to the tubes (16) of the core (12) for directing fluid out of the tubes (16) and longitudinally into the tank (18). A first embodiment of the invention provides tube diverter walls (32, 34) that are planar. A second embodiment of the invention provides tube diverter walls (32, 34) that are curved.

IPC 1-7

F28D 1/053; F28F 9/02; F28F 27/02

IPC 8 full level

F28D 1/053 (2006.01); **F28F 9/02** (2006.01); **F28F 27/02** (2006.01)

CPC (source: EP US)

F28D 1/05366 (2013.01 - EP US); **F28F 9/0202** (2013.01 - EP US); **F28F 9/0265** (2013.01 - EP US); **F28F 2220/00** (2013.01 - EP US)

Cited by

EP3336477A1; EP1643201A1; EP4306893A1; US7395853B2; US11982492B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1528347 A2 20050504; EP 1528347 A3 20071121; EP 1528347 B1 20090114; AT E421075 T1 20090115; DE 602004019031 D1 20090305; US 2005109492 A1 20050526; US 7152669 B2 20061226

DOCDB simple family (application)

EP 04077953 A 20041026; AT 04077953 T 20041026; DE 602004019031 T 20041026; US 69632403 A 20031029